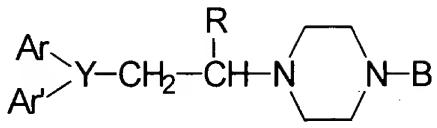
WHAT IS CLAIMED IS:

1. A compound of the formula:



wherein

each of Ar and Ar' is independently an optionally substituted aryl or heteroaryl group,

Y is a nitrogen atom or a CH, C-OH, C-CN, C-$CONH_2$ group,

R is a hydrogen atom or a lower alkyl group,

B is a substituted aryl or optionally substituted heteroaryl group,

with the provisos that:

1) when any of Ar, Ar', or B is a heteroaryl group, any of nitrogen, oxygen, or sulfur can be present in said heteroaryl group only once;

2) when any or both of Ar and Ar' are substituted, they cannot be substituted by a halogen atom; and

3) when B is methoxyphenyl and Y is any of C-OH, C-CN, and C-$CONH_2$, then Ar and Ar' are not simultaneously unsubstituted phenyl or thienyl; and

enantiomers, diastereomers, N-oxides, crystalline forms, hydrates and pharmaceutically acceptable salts thereof.

2. A compound of claim 1, wherein Y is nitrogen, a CH, or a C-OH group.

3. A compound of claim 1 selected from the group consisting of:

1-(3,3-diphenylpropyl)-4-(2-methoxyphenyl)piperazine;

1-(3,3-diphenylpropyl)-4-[5-(2,3-dihydro-1,4-benzodioxinyl)]piperazine;

1-[3,3-*bis*-(4-nitrophenyl)propyl]-4-(2-methoxyphenyl)piperazine;

1-[3,3-*bis*-(4-methoxyphenyl)propyl]-4-(2-methoxyphenyl)piperazine;

1-[*N-N-bis*-(2-pyridyl)-2-aminoethyl]-4-(2-methoxyphenyl)piperazine;

1-[3-cyano-3,3-*bis*-(2-pyridyl)propyl]-4-(2-methoxyphenyl)piperazine;

1-[3-cyano-3-phenyl-3-(2-pyridyl)propyl]-4-(2-methoxyphenyl)piperazine;

~~1-[3,3-*bis*-(2-pyridyl)propyl]-4-(2-methoxyphenyl)piperazine;~~

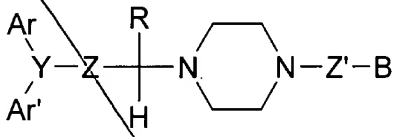
~~1-[3-phenyl-3-(2-pyridyl)propyl]-4-(2-methoxyphenyl)piperazine;~~

1-[3-aminocarbonyl-3-phenyl-3-(2-pyridyl)propyl]-4-(2-methoxyphenyl)piperazine;
1-[*N*-(2-nitrophenyl)-*N*-(2-pyridyl)-2-aminoethyl]-4-(2-methoxyphenyl)piperazine;
1-[3-cyano-3-(2-nitrophenyl)-3-phenylpropyl]-4-(2-methoxyphenyl)piperazine;
1-[3-aminocarbonyl-3-(2-nitrophenyl)-3-phenylpropyl]-4-(2-methoxyphenyl)piperazine;
~~1-[3-hydroxy-3,3-*bis*-(2-pyridyl)propyl]-4-(2-methoxyphenyl)piperazine;~~
1-[3-cyano-3-(2-nitrophenyl)-3-(2-pyridyl)propyl]-4-(2-methoxyphenyl)piperazine;
~~1-(4-1*H*-indolyl)-4-[3,3-*bis*-(2-pyridyl)propyl]piperazine;~~
1-[3-aminocarbonyl-3-(2-nitrophenyl)-3-(2-pyridyl)propyl]-4-(2-methoxyphenyl)-piperazine;
and enantiomers, N-oxides, hydrates, and pharmaceutically acceptable salts thereof.

4. A pharmaceutical composition of a compound of claim 1 and a pharmaceutically acceptable diluent or carrier.

5. A pharmaceutical composition of a compound of claim 2 and a pharmaceutically acceptable diluent or carrier.

6. A method for treating neuromuscular dysfunction of the lower urinary tract in a mammal in need of such treatment, said method of administering to said mammal an effective amount for treating said dysfunction of a compound of the formula:



~~wherein~~

Ar is an aryl or heteroaryl radical;
Y is nitrogen, a CH, C-OH, C-CN, or C-$CONH_2$ ~~group~~;
R is hydrogen or a lower alkyl group;
B is an aryl or heteroaryl radical;
wherein Z is a methylene group or an ethylene group;
wherein Z' is a bond, a methylene group or an ethylene group; and
enantiomers, N-oxides, hydrates, and pharmaceutically acceptable salts thereof..

7. The method of claim 6, wherein Y is nitrogen, a CH, or a C-OH group.

8. The method of claim 6, wherein said compound is selected from the group consisting of :

1-(3,3-diphenylpropyl)-4-(2-methoxyphenyl)piperazine;
1-(3,3-diphenylpropyl)-4-[5-(2,3-dihydro-1,4-benzodioxinyl)]piperazine;
1-[3,3-*bis*-(4-nitrophenyl)propyl]-4-(2-methoxyphenyl)piperazine;
1-[3,3-*bis*-(4-methoxyphenyl)propyl]-4-(2-methoxyphenyl)piperazine;
1-[*N*-*N*-*bis*-(2-pyridyl)-2-aminoethyl]-4-(2-methoxyphenyl)piperazine;
1-[3-cyano-3,3-*bis*-(2-pyridyl)propyl]-4-(2-methoxyphenyl)piperazine;
1-[3-cyano-3-phenyl-3-(2-pyridyl)propyl]-4-(2-methoxyphenyl)piperazine;
1-[3,3-*bis*-(2-pyridyl)propyl]-4-(2-methoxyphenyl)piperazine;
1-[3-phenyl-3-(2-pyridyl)propyl]-4-(2-methoxyphenyl)piperazine;
1-[3-aminocarbonyl-3-phenyl-3-(2-pyridyl)propyl]-4-(2-methoxyphenyl)piperazine;
1-[*N*-(2-nitrophenyl)-*N*-(2-pyridyl)-2-aminoethyl]-4-(2-methoxyphenyl)piperazine;
1-[3-cyano-3-(2-nitrophenyl)-3-phenylpropyl]-4-(2-methoxyphenyl)piperazine;
1-[3-aminocarbonyl-3-(2-nitrophenyl)-3-phenylpropyl]-4-(2-methoxyphenyl)piperazine;
1-[3-hydroxy-3,3-*bis*-(2-pyridyl)propyl]-4-(2-methoxyphenyl)piperazine;
1-[3-cyano-3-(2-nitrophenyl)-3-(2-pyridyl)propyl]-4-(2-methoxyphenyl)piperazine;
1-(4-1*H*-indolyl)-4-[3,3-*bis*-(2-pyridyl)propyl]piperazine;
1-[3-aminocarbonyl-3-(2-nitrophenyl)-3-(2-pyridyl)propyl]-4-(2-methoxyphenyl)-piperazine
and enantiomers, N-oxides, hydrates, and pharmaceutically acceptable salts thereof.

9. The method of claim 6 wherein said administration is effective for ameliorating at least one of urinary urgency, increased urinary frequency, incontinence, urine leakage, enuresis, dysuria, urinary hesitancy, and difficulty in bladder emptying in said mammal.

10. The method of claim 7 , wherein said administration is effective for ameliorating at least one of urinary urgency, increased urinary frequency, incontinence, urine leakage, enuresis, dysuria, urinary hesitancy, and difficulty in bladder emptying in said mammal.

11. The method of claim 8, wherein said administration is effective for ameliorating at least one of urinary urgency, increased urinary frequency, incontinence, urine

leakage, enuresis, dysuria, urinary hesitancy, and difficulty in bladder emptying in said mammal.

12. The method of claim 6, wherein said administering is achieved using a route selected from the group consisting of oral, enteral, intravenous, intramuscular, subcutaneous, transmucosal, transdermal, and by-inhalation routes.

13. The method of claim 12, wherein said compound is administered to said mammal in an amount of between about 0.01 and 25 mg/kg/day.

14. The method of claim 12, wherein said amount is between about 0.2 and about 5 mg/kg/day.

15. The method of claim 12, wherein the amount of said compound is between about 50 and 400 mg/day.

16. The method of claim 12, wherein the amount of said compound is about 200 mg/day.

17. The method of claim 12, wherein said administering is achieved using a route selected from the group consisting of oral and transdermal routes.

18. The method of claim 17, wherein the amount of said compound is between about 0.1 and 10 mg/kg/day.

19. A pharmaceutical composition of a compound of claim 3 and a pharmaceutically acceptable diluent or carrier.

20. The pharmaceutical composition of claim 19 which comprises at least one excipient selected from the group consisting of lubricants, plasticizers, colorants, absorption enhancers, and bactericides.

Added
a2